



'Stewardship in Knowledge'

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An Article, once available in print.
on-shelf locally ...

... is now online & accessed
remotely,

‘anytime/anywhere’

=> Improved Ease of Access 😊

What of Continuity of Access?



That Article in the Scholarly Record is not in the custody of Libraries, nor yet on their digital shelves.



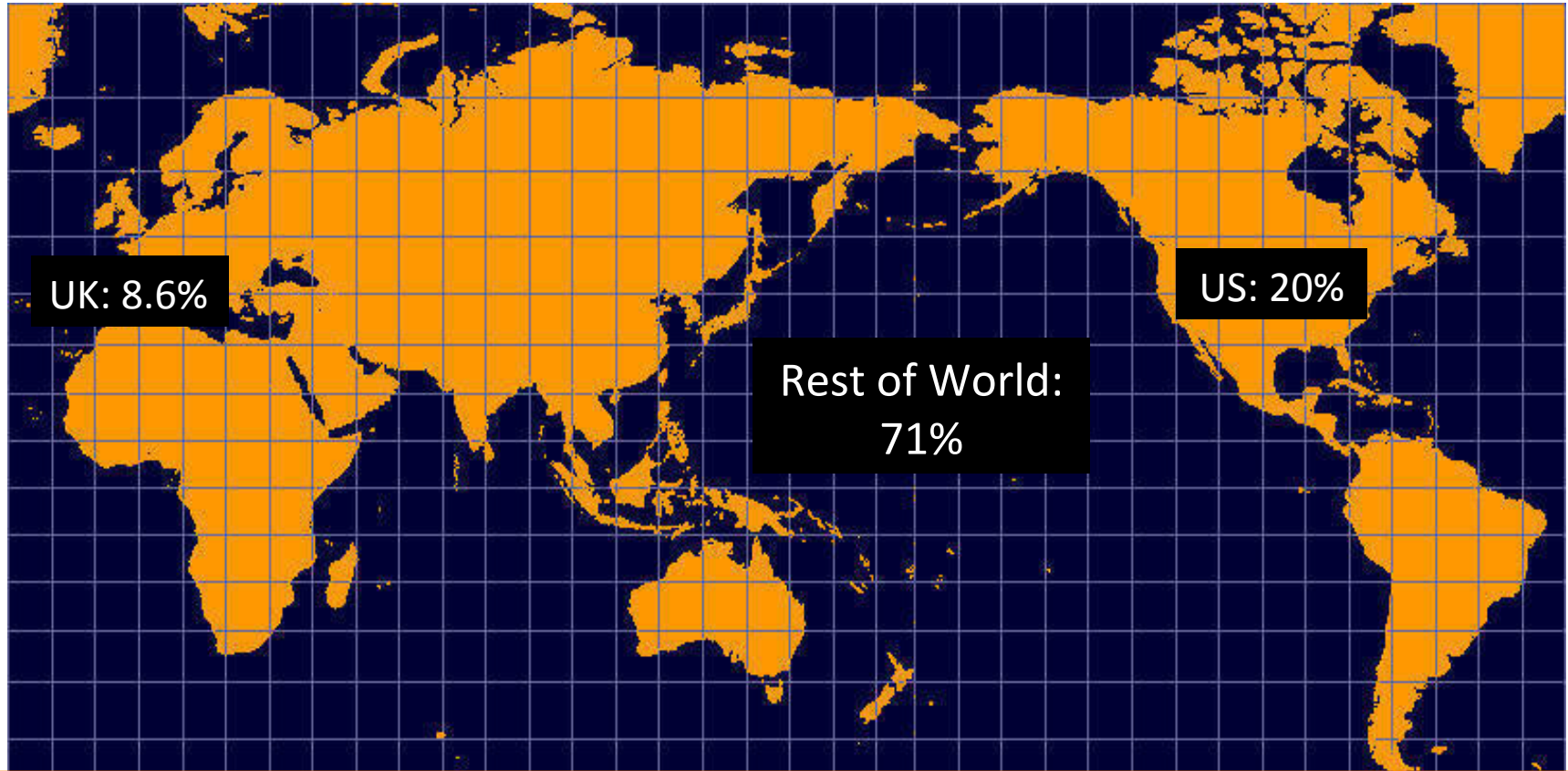
Threat to The Integrity of The Scholarly Record

=> The Indefinite Article

“a scholarly article that lasts for an unknown or unstated length of time.”

“reassurance about long-term preservation before confirming a University policy of going e-only.”

This is a global challenge: trans-national action



Researchers (& libraries/publishers) in any one country are dependent upon content written and published as serials in countries other than their own

%age of 132,806 ISSN issued for e-serials (December 2013)

Publishers had archival responsibility thrust upon them, and now need to meet the threats of:

1. Loss - natural disasters & human folly

2. Digital Decay – bit rot & format obsolescence

+ need to address business concerns of libraries:

- Risks from commercial failure & transfers
- Post-Cancellation Access to Back Copy

“Brought on by a simple twist of fate ...”

So, who does forever?

Keepers with archival intent, offering digital shelving:

① Web-scale not-for-profit archiving agencies:



② National libraries ...



KB

Koninklijke Bibliotheek



National Science Library,
Chinese Academy of Sciences

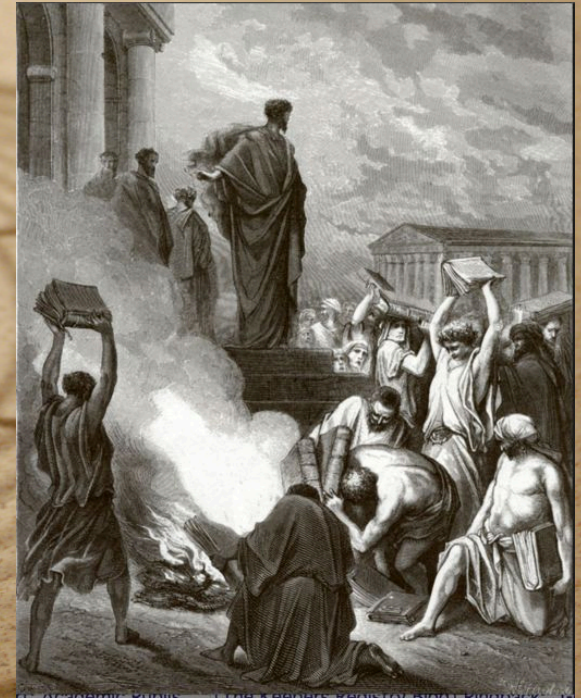
③ Research libraries: consortia & specialist centres ...



Loss: Many archiving organisations a Good Thing



Some bad stuff will happen!

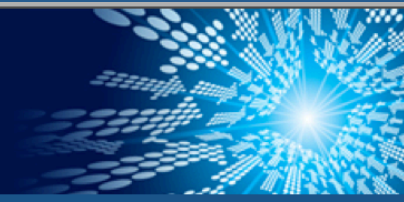


“Digital information is best preserved by replicating it at multiple archives run by autonomous organizations”

BETA

The Keepers Registry

Supporting long-term access to journal content



[Home](#) | [Journals](#) | [Publishers](#) | [Archiving Agencies](#) | [FAQ](#) | [About](#) | [Help](#)

... to discover who is looking after what

Search

Input a search term (e.g. free text, or a title or ISSN(s))

[Display example searches](#)

[Glossary and definitions](#)

The following organisations are the Keepers of digital content, working on your behalf to ensure long-term access to the scholarly and cultural record. They provide the registry with information on their archival holdings, ordered by most recent update (date of which is shown):

- **British Library** (4 March 2014)
- **Archaeology Data Service** (3 March 2014)
- **HathiTrust** (1 March 2014)
- **Portico** (28 February 2014)
- **Global LOCKSS Network** (24 February 2014)
- **Scholars Portal** (13 February 2014)
- **Library of Congress** (3 February 2014)
- **National Science Library, Chinese Academy of Sciences** (6 January 2014)
- **CLOCKSS Archive** (1 December 2013)
- **e-Depot** (24 April 2012)

Current Statistics

- Serials with volumes reported as 'preserved' by at least one Keeper: 23,268
- Serials with volumes reported as 'preserved' by three or more: 9,652

A serial is counted as "preserved" when an agency reports completed action on one or more volumes. Approximately 100,000 ISSN's have been issued for e-serials. The archival status of approximately 77,000 is not known.

Work on other serials (and volumes) is 'in progress'. See the [FAQ](#) for more information.

New in 2014

**Library of Congress
and Scholars Portal
now reporting in**

Decay over time : Bit Rot, Formats ...

& now 'Reference Rot'

*When what was referenced & cited
ceases to say the same thing, or 'has ceased to be'*



<http://www.snorgtees.com/this-parrot-has-ceased-to-be>

... undermining the integrity of what is published



Two-year project funded by Andrew Mellon Foundation

We will have more to say in 2015 ☺



THE UNIVERSITY of EDINBURGH



But e-journals should be easy – right?



Some signs of Progress:

In 2011, the Keepers Registry recorded **16,558** titles as ingested by at least one 'keeper'

In 2013, **21,557**

March 2014, **23,268**

“Are we there yet?” ... “Don’t think so”

‘Ingest Ratio’ = titles being ingested by **one or more Keeper**
/ ‘online serials’ in ISSN Register

= 23,268 / 136,965 [in March 2014]

=> **17%**

(We do not know about 83% of e-serials having ISSN)

‘KeepSafe Ratio’ = titles being ingested by **3+ Keepers**
/ ‘online serials’ in ISSN Register

= 9,652 / 136,965

=> **7%**



In 2011/12 three major research libraries in the USA
(Columbia, Cornell & Duke)
checked archival status of serial titles regarded as important

'Ingest Ratio' = 22% to 28%, ie about a quarter

=> fate of c.75% is unknown

As reported in: P. Burnhill (2013) Tales from The Keepers Registry: Serial Issues About Archiving & the Web. *Serials Review* 39 (1), 3–20. <http://www.sciencedirect.com/science/article/pii/S0098791313000178>, & <https://www.era.lib.ed.ac.uk/handle/1842/6682>



BIG
publishers
act early but
incompletely

The "Long Tail"



Priority:
find economic way to
archive content from ...

very many 'at risk' e-journals from many small publishers



User-centric Evidence

... with usage logs for the UK OpenURL Router*

- 8.5m full text requests in UK during 2012

=> 53,311 online titles requested

Analysis in 2013::

'Ingest Ratio' = 32% (16,985/53,311)

=> over two thirds 68% (36,326 titles) held by none!

Next Step is to use Ulrich's data to focus on 'peer-reviewed' literature

* As reported in Keepers Registry Blog, OpenURL Router passes 'discovery' requests to commercial OpenURL resolver services; developed & delivered by EDINA as part of Jisc support for UK universities & colleges



* Note to Self/Team *

- Definitely must write this up as a published article ...
 - “Whither The Scholarly Record: Evidence for Action” (say)
 - ✧ Need to make the data available for others to analyze ...
 - ✧ Need to make known those titles in the scholarly record that need archiving!
- Wonder if anyone here wants to publish that? ;)
 - ✧ Need to ensure that it is archived properly
 - Don't want it to be yet another Indefinite Article?



Imagine STM 2020

- **Best Case scenario**

- Publishers (& Libraries) have acted
- Together with the Keepers they have ensured that all the e-journal content used by researchers in 2014 has been preserved and can be used successfully in 2020

Imagine STM 2020

- Best Case
 - Publishers (& Libraries) have acted
 - They have ensured that all the e-journal content used by researchers in 2014 has been preserved and can be used successfully in 2020
 - **Worst Case scenario**
 - Publishers (& Libraries) have failed to act sufficiently!
 - Important literature has been lost
 - Citizens & scholars complain of neglect
-

What you can do to meet this challenge

1. Engage now with the real heroes of this story

=> Publish but do not perish ...

① Web-scale not-for-profit archiving agencies:



② National libraries ...



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③ Research libraries: consortia & specialist centres ...



HATHI
TRUST

What you can do today!

1. Engage now with the real heroes of this story: those that provide digital shelving

2. Go to the Keepers Registry => thekeepers.org

✧ Search on Title/ISSN

- Check key volumes & issues are being archived

✧ Browse by publisher

2. Sign-up to test the new Member Services:

✧ Title List Comparison tool

- Are your Titles actually being archived?
- & Check archival status for ISSNs listed in citations



✧ Linking Options for 'archival status' on your website



Time's Up!

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